<u>Program Description/Textbook or Print Instructional Material</u>

Vendor:__Thomson Learning/Course Technology_Web Address:__www.course.com_____

Title: ___Fundamentals of Java, Comprehensive_____

Author: __Lambert/Osborne_____ Copyright: _2003

ISBN: ___0-619-05962-1__ Course/Content Area:__Vocational and Career Education; Information
Technology Program; Programming

Intended Grade or Level: _____9-12_____ Readability Level:_9.0_____(Flesch-Kincaid)_____

List Price: __56.95_____ Lowest Wholesale Price: _____42.00_____

All materials bid as of July 1, 2003 must be offered in an alternative format for students who require reading accommodations. A description of the levels of accommodation is included on p. 8-9 of this bid packet. The Kentucky Department of Education must receive a copy of the alternative format if the material is placed on the State Multiple List.

Level of Accomodations (Level One, Two or Three)_____ Level Three_____

If Level Two or Three, please provide rationale for not meeting Level One Compliance__It is_not_financially feasible for our products to meet Level One at this time.

FEATURES

DISCLAIMER: The features of each book or program were developed by the publisher and do not reflect the opinion of the State Review Team, State Textbook Commission, nor of the Kentucky Department of Education.

<u>Content</u>
- Includes "BreezySwing" on the Instructor CD-ROM that simplifies the programming of graphical user interfaces.
- Covers all the AP requirements for the A and AB levels.
- Provides improved and expanded coverage of terminal IO; collection classes from java.util; and software analysis, design, implementation, and testing.
- Includes SCANS-correlations.

<u>Student Experiences</u>
- Straight-forward techniques teach students how to convert standalone applications to applets.

<u>Assessment</u>
Completely revised and updated, Fundamentals of Java: Comprehensive Course, Second Edition now covers all of the AP requirements for Computer Science Exams A and AB. By taking a multilevel approach to teaching Java, the text is suitable for a wide range of students, from beginners to those ready for advanced data structures. Clear, practical explanations guide students through even the most complex programming topic. Since it is non-software specific, it can be used with any Java program compiler, including Borland, Sun Microsystems, Symantec and others.

<u>Organization</u>

UNIT 1: GETTING STARTED WITH JAVA
Lesson 1 Background
Lesson 2 First Java Programs
Lesson 3 Syntax, Errors, and Debugging
Lesson 4 Introduction to Control Statements

UNIT 2: THE NEXT STEP WITH JAVA
Lesson 5 Introduction to User-Defined Classes
Lesson 6 More Operators and Control Statements
Lesson 7 Improving the User Interface

UNIT 3: ARRAYS, RECURSION, AND COMPLEXITY
Lesson 8 Introduction to Arrays
Lesson 9 Classes Continued
Lesson 10 Arrays Continued
Lesson 11 Recursion, Complexity, Searching and Sorting

UNIT 4: USING ABSTRACT DATA TYPES
Lesson 12 Object Oriented Analysis and Design
Lesson 13 Linear Collections: Lists
Lesson 14 Linear Collections: Stacks, and Queues
Lesson 15 Unordered Collections: Sets and Maps

UNIT 5: IMPLEMENTING ABSTRACT DATA TYPES
Lesson 16 Implementing Lists, Stacks, and Queues
Lesson 17 Implementing Sets and Maps
Lesson 18 Implementing Trees and Priority Queues

UNIT 6: GRAPHICS, FILES, APPLETS, AND SWING
Lesson 19 Simple Two-Dimensional Graphics
Lesson 20 Files
Lesson 21 Introduction to HTML and Applets
Lesson 22 Swing and AWT

Resource Materials
Gratis Items To Be Provided And Under What Conditions
Instructor's Resource Kit (0-619-05972-9) Free 1 per teacher

Available Ancillary Materials
Activities Workbook (0-619-05965-6)

RESEARCH DATA AND EVIDENCE OF EFFECTIVENESS

DISCLAIMER: The research data and evidence of effectiveness was provided by the publisher and does not reflect the opinion of the State Review Team, State Textbook Commission, nor the Kentucky Department of Education.

*NOTE: Please complete this section by indicating the research data and evidence of effectiveness or give a web site where the information is located. If there is no research data and evidence of effectiveness, please indicate "**not available**" in the space.*

Group V - Career/Technical Vocational/Practical Living Education Instructional Materials Evaluation Tool IT Programming

Title: Fundamentals of JAVA — Comprehensive (AP - Test A & B)	COST: $ 42.00

Publisher: Thomson Learning/Course Technology

Item Evaluated: Textbook

Copyright Date: 2003	Evaluator: Scott Horan/David Davis
Content Level: 9-12	Date of Evaluation: 7/28/2003

This section completed by Exceptional Children Services

Overall Strengths and/or Weaknesses

Disclaimer: Comments on the strengths and/or weaknesses of each book, material or program were written by members of the State Textbook/Instructional Materials Review Team and reflect their opinions . They do not reflect the opinions of the State Textbook Commission nor the Kentucky Department of Education. In addition, the State Textbook/ Instructional Materials Review Team completed each evaluation form during the week of July 28-Aug. 1, 2003. In order to maintain the integrity of the of the review team's comments, editing was limited to spelling and punctuation.

Recommendations:
X Recommended by reviewers to State Textbook Commission
☐ Not recommended by reviewers to State Textbook Commission

Publisher's Explanation of Reviewer's Comments: By action of the State Textbook Commission, publishers are provided limited space, 150 words, to respond to what they may consider factual errors made by the reviewers in the evaluation.

Group V - Career/Technical
Vocational/Practical Living Education
Instructional Materials Evaluation Tool
IT Programming

Title: Fundamentals of JAVA — Comprehensive	Publisher: Pearson Education/Course Technology

Technology Management Summary Data:	20 possible points	_____13_____ points earned
Technology Management Comments:		

Technology Presentation/Interface Summary Data:	40 possible points	_____35_____ points earned
Technology Presentation/Interface Comments:		

Content Summary Data:	36 possible points	_____25_____ points earned
Content Comments:		

Instruction & Management Summary Data	52 possible points	_____44_____ points earned
Instruction & Management Comments:		

Organization & Structure Summary Data	36 possible points	_____32_____ points earned
Organization & Structure Comments:		

Resource Material Summary Data	40 possible points	_____35_____ points earned
Resource Material Comments:		

Group V - Career /Technical & Vocational/Practical Living
Electronic Instructional Media Review Form—Fundamentals of JAVA — Comprehensive—Thomson/CT
Stand Alone/Independent or Integrated Software for IT Programming

Equipment (circle or change fill color)
Windows
Macintosh
CD-ROM
DVD
Sound
Other

If other, explain

Grade Level (circle or change fill color)
Primary
Intermediate
Middle
High

Audience (circle or change fill color)
Individual
Small Group
Large Group

Format (circle or change fill color)
Stand Alone/Independent
Integrated
Supplemental
In lieu of basal test

Cost: Included with text

_____single copy	_____site license
_____network version	_____school version
_____lab pack of ___ copies	_____online

Type of Software: Check all that apply	_____Simulation	_____Management	_____Interdisciplinary	_____Problem Solving	_____Tutorial
	_____Exploratory	_____Creativity	_____Drill and Practice	_____Critical Thinking	_____Utility	Online Tests—Other:

Rating Scale:	3—Some of the time	1—None of the time
4—All or the time	2—Minimally	0— Not applicable

Management	Rating
Allows customizing for individual learning needs.	2
Allows students to exit and resume at a later time.	1
Keeps a students performance record, where needed.	4
Allows control of various aspects of the software (e.g., turning sound off).	2
Allows for printed reports.	4
Comments:	**Total** **13**

Presentation/Interface	Rating
Presents material in an organized manner.	4
Has consistent, easy-to-use, on-screen instructions.	4
Has developmentally correct presentation format.	4
Adapts to different learning environments (learning styles/multiple intelligences, etc.)	2
Accessible for special needs students.	4
Runs smoothly, without long delays.	4
Presents easy-to-view text and graphics.	3
Presents easy-to-hear and understand sounds.	3
Avoids unnecessary screens, sounds, and graphics.	4
Provides immediate, appropriate feedback.	**3**
Comments:	**Tota** **35**

Content—IT Programming	Rating
Career Focus/Employability Skills/Workplace Readiness Skills	* 0
Customer Needs Analysis	1
Analysis of Programming Requirements	0
Develop Programming Structure	4
Design and Develop the Program	4
Implement Program Code	4
Test Program	4
Validate Program	4
Major Types of Programs: Visual Basic, **Java**, C++, etc.	4
Comments: * 0 AP Text	**Total** **25**

Rating Scale:	2—Minimally
4—All or the time	1—None of the time
3—Some of the time	0— Not applicable

Instruction and Assessment	Rating
Identifies a Sense of Purpose	4
Builds on Student Ideals	4
Engages Students	4
Develops Computer Maintenance Ideas	0
Promotes Student Thinking	4
Assesses Student Progress	4
Enhances The Learning Environment	4
Reading level is appropriate for interest and ability level of intended student group; level remains consistent throughout.	4
Commonwealth Accountability Testing System (CATS) "like" Assessment is provided	4
Variety of Assessments (diagnostic, formative, summative, open response, multiple choice, individual, small group, oral, demonstrations, presentations, self and peer performance, portfolio prompts) is included.	4
Includes activities and opportunities for integration of technology.	4
Reflects researched-based practices (e.g. hands-on activities, technology, problem-solving situations)	4
Differentiation techniques and activities suggested.	0
Comments:	**Total 44**

Rating Scale:	3 – Some potential for learning	1 - Not present
4 – High potential for learning	2 – Little potential for learning	0 – Not applicable

Organization and Structure	Rating
Organization is logical and allows for spiraling of content.	4
Vocabulary and key terms are clearly defined and easily accessible within each lesson.	4
Visual illustrations (e.g. graphs, charts, models) and examples are clearly presented and content-related.	4
Illustrations and language reflect diversity (e.g. racial, ethnic, cultural, age, gender, disabilities).	0
Legible type, length of lines, spacing, and page layout and width of margins contribute to overall appearance and use.	4
Student materials seem durable and conducive to daily use.	4
Includes sufficient glossary, index and appendices.	4
Employs accurate grammar and spelling	4
Organization of material can be effectively used with Standards Based Units, Core Content and Program of Studies.	4
Comments:	**Total 32**

Resource Materials	Rating
Teacher materials coordinate easily with student materials (e.g. additional resources included at point of need, student pages shown, integration of technology indicated)	4
Activities are included that adapt to the various learning styles, intelligences, and interest/ability levels.	4
Extension activities including adaptations and accommodations for students with special needs.	3
Resources provide objectives, background information, common student errors, hints, advice for lesson implementation and real-world connections, connections with career and/technology and references (e.g. solution manuals, study guides)	4
Suggestions are made for integration of themes and /or interdisciplinary instruction.	4
Integration opportunities suggested and examples given.	4
Teacher resources are available online.	4
Online resources available – Repeat of information in text.	4
Online resources available – Practice skills only.	0
Online resources available – New application materials.	4
Comments: Excellent teacher resources on CD, including tests and Power Point; textbook is very student-friendly in readability and illustration	**Total 35**

Rating Scale:	2—Minimally
4—All or the time	1—None of the time
3—Some of the time	0— Not applicable